

Claims

- 2.6.11
1. A food composition comprising soluble solids in the range of about 50% to about 90% by weight, at least 70% by weight thereof being a sweetening system comprising sucrose and non sucrose sweeteners in a weight ratio of sucrose to non sucrose sweeteners of 0:100 to 95:5, wherein the non sucrose sweetener is of a DE (Dextrose Equivalent) of at least about 30; a carrageenan component in an amount sufficient to form a gel, and water to balance, and wherein the gelation temperature, determined as the intersection of the graphs of elastic modulus, G' , and viscous modulus, G'' , measured on a Haake Rheometer, RS 100 using the settings - Gradient $1^{\circ}\text{C}/\text{min}$, 0,4640 Hz, $95^{\circ}\text{C} - 65^{\circ}\text{C}$, $t=1800$ s, 0,50 Pa, $65^{\circ}\text{C} - 35^{\circ}\text{C}$, $t=1800$ s, 2,50 Pa - Stress sweep 35°C 0,10 Pa- 20,00 Pa, 0,4640 Hz, of said food composition is $< 95^{\circ}\text{C}$.
 2. The composition according to claim 1, wherein said non sucrose sweetener is a hydrogenated starch hydrolysate syrup of a DE of at least about 30, preferably a DE > 30 fructose or glucose syrup.
 3. The composition according to claim 1, wherein said non sucrose sweetener is a hydrogenated starch hydrolysate syrup of a DE of least about 40, preferably a DE > 40 fructose or glucose syrup.
 4. The composition according to claim 1, wherein said non sucrose sweetener is a hydrogenated starch hydrolysate syrup with a DE in the range of about 40 to about 100, particularly preferred about 50 to 90, especially about 60 to 70.
 5. The composition according to claim 4, wherein said non sucrose sweetener is a high maltose glucose syrup, particularly a high maltose glucose syrup of a DE of about 50 to 60.

6. The composition according to claim 1, wherein the sucrose can be replaced wholly or partly by an aqueous solution of a sugar alcohol.
7. The composition according to claim 6, wherein said sugar alcohol is selected among sorbitol, mannitol, xylitol, isomalt, lactitol, maltitol or a maltitol syrup.
- Sub A² 5 8. ~~The~~ composition according to any one of the claims 1 to 7, wherein the ratio of sucrose to non sucrose sweetener is from about 10:90 to about 70:30, preferably from about 20:80 to about 30:70, particularly preferred about 1:2.
9. The composition according to claim 1, wherein the soluble solids thereof is in the range of 70 to 85% by weight, particularly preferred about 75 to 80% by weight.
- 10 10. The composition according to claim 1, wherein the gelation temperature of said food composition is less than 85° C, preferably less than 80° C.
11. The food composition according to claim 1, wherein at least about 80%, preferably at least about 90% of the soluble solids are comprised by said sweetening system.
- 15 12. The composition according to claim 1, wherein said carrageenan component is an iota carrageenan or a kappa carrageenan or mixtures thereof.
13. The composition according to claim 12, wherein said carrageenan is present in an amount of about 0.25 to 10.0% by weight, preferably about 0.75 to 5.0%, especially about 1 to 3% by weight of the food composition.
- 20 14. The composition according to claim 1 further comprising as additional gelling agent a hydrocolloid selected from the group comprising pectin, agar-agar, alginates, carboxy methyl cellulose, methyl cellulose, hydroxy propyl cellulose,

curdian, xanthans, gelatine, starch and gum arabic in an amount of up to about 10.0% by weight of the food composition.

15. The composition according to claim 1, wherein said soluble solids further comprise one or more ingredients selected among milk solids, vitamins, minerals,
5 food grade acids and salts thereof, flavourings, colourings, artificial sweeteners, preservatives and bulking agents.
16. The composition according to claim 1, wherein said food composition is a high sugar confectionery.
17. The composition according to claim 16, wherein said food composition
10 is soft candies or wine gum.
18. The composition according to claim 1, wherein said composition is an aerated confectionery and further comprises a whipping agent.
19. The composition according to claim 1, wherein said composition is a glazing.
- 15 20. A process for producing a food composition according to claim 1 comprising (a) dispersing carrageenan in a syrup of a non sucrose sweetener at a temperature sufficient to disperse the carrageenan in said syrup while stirring, (b) adding water and heating the mixture to the boiling point thereof, (c) adjusting the soluble solids content to from about 50% to about 90% by weight, (d) depositing said mixture and
20 (e) cooling said mixture to below the depositing temperature of said mixture.
21. The process according to claim 20, wherein sucrose, if any, is added in step (c).

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22. The process according to any one of the claims 20 to 21, wherein the temperature sufficient to disperse the carrageenan in the syrup of the non sucrose sweetener is at least about 50, especially at least about 60°C.
23. The process of any one of the claims 20 to 22, wherein one or more
- 5 ingredients selected among milk solids, vitamins, minerals, food grade acids, flavourings, colourings, artificial sweeteners, preservatives and bulking agents is (are) added between steps (c) and (d).
24. The process according to any one of the claims 20 to 23, wherein in step (d) said hot mixture is deposited in moulds.
- 10 25. A use of a carrageenan component for gelling a food composition of a soluble solids content of about 50 to about 90% by weight, at least 70% by weight thereof being a sweetening system comprising sucrose and non sucrose sweeteners in a weight ratio of sucrose to non sucrose sweeteners of 0:100 to 95:5, wherein the non sucrose sweetener is of a DE of at least about 30, and wherein the gelation
- 15 temperature of said food composition, determined as the intersection of the graphs of elastic modulus, G' , and viscous modulus, G'' , measured on a Haake Rheometer, RS 100 using the settings - Gradient 1°C/min, 0,4640 Hz, 95°C - 65°C, $t=1800$ s, 0,50 Pa, 65°C - 35°C, $t=1800$ s, 2,50 Pa - Stress sweep 35°C 0,10 Pa- 20,00 Pa, 0,4640 Hz, is < 95°C.
- 20 26. The use according to claim 25, wherein said carrageenan is an iota carrageenan or a kappa carrageenan or mixtures thereof.